DEPARTMENT OF PESTICIDE REGULATION

Department of Pesticide Regulation

The mission of the Department of Pesticide Regulation (DPR) is to protect human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management.

Protecting California's Water, Air, Food, and Land

Cal/EPA Goals 1, 2, and 3DPR Strategic Plan Goal 1,

Pesticides may adversely impact our environment. Protecting our environment from the use of pesticides is an expected outcome of the pesticide regulatory program. This outcome is driven by sound science and adequate data as part of a process for thorough, timely, and ongoing evaluations.

Accomplishments

- 1. **Chemigation Initiative**: DPR conducted 10 training sessions on September 10 and 18; October 21 and 24; November 7, 12, and 13; and December 5 and 11, to educate State and county enforcement staff and pesticide users about label requirements to protect the environment when adding pesticides to irrigation water (chemigation).
- 2. Surface Water Protection: DPR finalized the surface water policy between DPR and the State Water Resources Control Board, completed the protocol and draft report on surface water modeling on correlation of detections with pesticide use and rainfall, and began to redesign the approach taken to protect surface water with the severe reduction of monitoring resources.
- 3. Clopyralid and Compost: DPR and the California Integrated Waste Management Board (CIWMB) held four stakeholder meetings to solicit information on the scope of the problem and possible solutions. DPR and CIWMB contacted the U.S. Environmental Protection Agency (U.S. EPA) regarding California's interest in developing tests to assess the fate of herbicides in the composting environment.
- 4. Propanil Regulations: Propanil is an herbicide used to control weeds (watergrass) in rice fields. For more than 30 years, the rice counties in the northern Sacramento Valley have had limited or no use of this material due to its potential to adversely affect nontarget crops, primarily prunes. DPR began an evaluation on the limited use of this material in 1998 to ensure it could be used without significant damage to nontarget crops. By the end of 2002, DPR completed draft regulations and sent them to the California Department of Food and Agriculture for the required 30-day comment period.

Priorities

1. **Surface Water Protection**: DPR will present a series of regulatory options to limit surface water pesticide residues from dormant sprays. In 1996, DPR agreed to promote voluntary efforts by the agricultural industry to reduce water quality impacts from dormant sprays. The monitoring data and staff analysis showed that no improvement occurred during the five-year plan.

- 2. Clopyralid and Compost: By April 2003, DPR will decide whether additional uses of clopyralid must be cancelled or regulated pursuant to AB 2356 (Keeley, Chapter 591, Statutes of 2002). DPR notified pesticide dealers and pest managers about the sales and use restrictions on clopyralid that began January 1, 2003. DPR and IWMB continue to meet with stakeholders to gather information on the impact of clopyralid on compost.
- 3. **Propanil Use Restrictions Implemented**: Propanil is an herbicide used on rice that has been found to damage adjacent crops. DPR will propose regulations to protect nontarget crops from this damage. Restrictions on the use of propanil will be implemented through the amended regulations for the 2003 season. If the regulations are not finalized in time, the restrictions will be imposed through county permit conditions.
- 4. **Rice Program**: DPR will work with the Central Valley Regional Water Quality Control Board and the rice industry to determine the monitoring that the rice industry will conduct in 2003.
- 5. **Groundwater Protection**: DPR will adopt regulations that will, for the first time, prevent groundwater contamination from pesticides throughout the state. A fact sheet summarizing the new rules is available at www.cdpr.ca.gov/docs/empm/gwp_prog/factsheet.pdf.
- 6. **Pesticides and the Clean Air Plan**: DPR will work with the Air Resources Board (ARB) on strategies to effectively reduce volatile organic compound emissions from agricultural and commercial structural pesticides.

Protecting Human Health

Cal/EPA Goal 4; DPR Strategic Plan Goal 2

The use of pesticides may adversely impact human health. Workers and sensitive populations such as children are at a greater risk. Protecting people from unacceptable pesticide risks is an expected outcome of the pesticide regulatory program. This outcome is driven by sound science and adequate data as part of a process for thorough, timely, and ongoing evaluations.

Accomplishments

1. School Integrated Pest Management (IPM) Program: DPR staff revised the school IPM training program based on results from the pilot program, and has planned four regional training sessions for spring of 2003. DPR added the Health and Environmental Look-uP Resource (HELPR) pages, a frequently asked questions document, and an electronic notification list to the Web site. A report on the 2002 survey of school pest management practices is under review. DPR staff has published an outreach article in a prominent school journal; three additional articles are in review. Staff members gave 10 presentations to school groups, risk managers, and other stakeholders. DPR staff responds to about 10 inquiries per week about various aspects of the Healthy Schools Act of 2000.

- 2. **Risk Assessments**: DPR completed risk assessments on metam-sodium, methyl isothiocyanate, azinphos-methyl, and methyl bromide (cumulative exposure assessment under SB 950 [Chapter 669, Statutes of 1984, Birth Defect Prevention Act] requirements). DPR sent several assessments to U.S. EPA and the Office of Environmental Health Hazard Assessment (OEHHA) for peer review: endosulfan, methyl parathion, hydramethylon, and orthophenylphenol.
- 3. **Licensing**: To improve processing and response for the annual renewal period, DPR initiated the license renewal process one month earlier than in the past and included a checklist to ensure submittal of proper documentation. The department also published timelines to reflect DPR commitments to process applications based on date of application receipt, established a "troubleshooter" to review and handle application problems in a timely manner, and actively worked with industry to broadly disseminate this information. As a result, DPR's licensing and certification program processed 8,535 pest control business and individual renewal applications (effective January 1, 2003) during the fourth quarter of 2002. DPR implemented new technology that enables the program to batch individual licenses and certificates directly from the database to the embosser. This results in fewer errors and quicker embossing of the plastic license and certificate cards.
- 4. **Pesticide Episode Response Plan Revision**: The pesticide episode response plan was developed in 1998. The response plan establishes a system for exchanging data between DPR, the San Diego and Imperial county agricultural commissioners (CAC), and their counterpart Mexican agencies. The plan provides for coordinated response to pesticide incidents that occur in the border area. DPR received funds from U.S. EPA that will allow DPR to contract with the San Diego and Imperial CACs to update contact information and to perform mock episode exercises in San Diego and Imperial Counties in 2003.
- 5. Food Safety: DPR is mandated by statute to monitor pesticide residues on food. DPR set new goals for the marketplace surveillance program that reflect on new pesticides being used and new commodities being grown. The program focus is on pesticides with the greatest health concern and contribution to dietary risk and subpopulations that may be uniquely sensitive to pesticide residues.
- 6. **Day of Reentry Foliar Residue Study**: DPR conducts monitoring studies to estimate exposures to workers. From 1997 through 2002, DPR scientists collected foliage samples from various crops to determine the level of pesticide residues at the expiration of a restricted-entry interval. A restricted-entry interval is the time period when a worker is prohibited from entering a treated field to perform cultural activities. The information collected in this study is used to evaluate pesticides and prepare risk assessments. The study was completed in late December.
- 7. **Greenhouse Study**: DPR scientists finalized a report on the results of a greenhouse field worker exposure monitoring study. Worker exposure to malathion, diazinon, and myclobutanil while picking roses and carnations was monitored. The information collected in this study will be used

to evaluate pesticides and prepare risk assessments. The report can be found at www.cdpr.ca.gov/docs/whs/pdf/hs1835.pdf.

Priorities

- 1. **Methyl Bromide Regulations**: DPR will readopt field fumigation regulations for methyl bromide.
- 2. **Lompoc Project Completed**: In January 2003, DPR will release the final reports detailing the pesticide exposures in the community of Lompoc. DPR led an interagency effort to evaluate local concerns from pesticide exposures.
- 3. Metam-Sodium Permit Guidance: DPR plans to complete a metam-sodium risk management directive by January 2003. DPR will allow a 30-day comment period, which includes consultation with OEHHA, ARB, and CACs. In spring 2003, DPR will recommend mitigations that may be implemented as regulations, label amendments, or permit conditions. Strategies to reduce metam-sodium exposure may be similar to those used for methyl bromide. Strategies include buffer zones, application methods, tarps, acreage limits, and incremental irrigation practices, all of which incorporate a balance of enforceability and feasibility. DPR will continue to meet with interested stakeholders.
- 4. School Integrated Pest Management Program: The School IPM Guidebook is being revised based on comments from the advisory group and will include training course curricula and new pest fact sheets. Four regional train-the-trainer sessions for school district staff are planned for spring 2003. DPR plans to continue development of, and resources contained in, the school IPM Web site. Additional publications on IPM in schools are planned to promote reduced-risk pest management throughout California schools.
- 5. Risk Assessments: DPR expects to complete four risk assessments under SB 950 (Birth Defect Prevention Act)-hydramethylnon, endosulfan, methyl parathion, and carbofuran. Under AB 2161 (Chapter 1200, Statutes of 1989, dietary risk assessments), DPR expects to complete two risk assessments-orthophenylphenol and propizamide.
- 6. **Licensing**: DPR has received U.S. EPA discretionary funds to develop laws and regulations examination questions, landscape maintenance pest control examination questions, and a landscape maintenance pest control category study guide. DPR will contract with the University of California to complete this project by May 2004.
- 7. **Preventing Pesticide Illness**: DPR maintains a compilation of data on pesticide-related illnesses recorded in California. Data are summarized into tables, and the findings are released to the public. By March 2003, DPR will release the 2001 annual pesticide-related illness and injury report. DPR is also reviewing and improving the pesticide illness surveillance program data validation process, thereby ensuring accurate reporting of illness data. DPR is also preparing the

database for availability to DPR stakeholders on the Internet. DPR plans to complete the validation project in May 2003.

Advancing Pest Management Systems

Cal/EPA Goals 7 and 8; DPR Strategic Plan Goal 3

Promoting the adoption of reduced-risk pest management strategies is a key element of the department's mission and its pollution prevention efforts.

Accomplishments

- 1. Integrated Pest Management Innovators: DPR's IPM innovator awards recognize California organizations that pioneer problem-solving approaches to pest control that use the least-toxic methods to increase the benefits and reduce the risks of pest management. DPR recognizes select groups for their inspiration and determination in pursuing new systems of pest control and applauds their efforts to share their experiences with others. Four awards were presented this year: Self-Insured Schools of California, Kern High School District, Clos du Bois Winery, and the City of Santa Cruz.
- 2. **Pesticide Use Trends**: In October, DPR released the "2001 Summary of Pesticide Use Reports by Chemical and Commodity." The summary is available on DPR's Web site at www.cdpr.ca.gov/docs/pur/pur00rep/00_pur.htm. As part of the report's executive summary, DPR included an analysis of pesticide use trends.

DPR also has completed a draft report on the trend in organophosphate use on almonds over the last nine years. The report also examines alternate methods of pest control for overwintering pests. The report indicates that pesticide use on almonds has declined significantly during the five years the industry has participated in a DPR alliance, going from 16 million pounds in 1998 to 10 million pounds in 2001. Particularly encouraging has been the steady decline in acres treated with dormant-season organophosphate (OP) insecticides. Applied during the winter to many orchard crops, residues of these insecticides have caused problems when rainfall washed them into rivers and streams. Although some of this decrease in OP use might be explained by weather and pest pressures, most has occurred because growers decided to use other, mostly reduced-risk, practices.

Priorities

1. **Reduced-Risk Pest Management Grants**: DPR will complete 11 pest management grants and 8 pest management alliance grants. Due to the budget shortfall, DPR will not be able to issue grants for additional projects.

Ensuring Environmental Justice

Cal/EPA Goal 5; DPR Strategic Plan Goals 5 and 6

A strong enforcement program is the cornerstone of improving the pesticide regulatory program and ensuring equal treatment under the law. All of DPR's activities must enhance opportunities for people to have access to, and participate in, its processes.

Accomplishments

- 1. Evaluation of Farmworker Protection: DPR released a report evaluating the notification and hazard communication requirements in Title 3, California Code of Regulations. Growers and farm labor contractors are required to inform their employees of pesticide applications that will occur on or near the work site. Growers and farm labor contractors must also make pesticide exposure information available to their employees. The report made a series of recommendations that will be considered for implementation in 2003. The report can be found at www.cdpr.ca.gov/docs/whs/pdf/hs1835.pdf.
- 2. County Permit and Use Reporting: DPR continued its support of geographic information systems (GIS) development at the county level. Deployment of the Kern County GIS program as a pilot basis in counties just beginning to develop their GIS capabilities and field border databases is ongoing. DPR has modified the preliminary copy of Kern County's application to allow users to process notices of intent online in the county office. This tool evaluates the proposed restricted material application with the specific field site and commodity listed on the permit, analyzes surrounding sensitive sites, and draws appropriate buffer zones. This allows the county biologist to make better-informed decisions regarding applications of restricted-use pesticides. Deployment to two pilot counties has taken place.
- 3. San Luis Obispo Farmworker Safety Initiative: Following three years of collaboration, the final report for the San Luis Obispo farmworker safety initiative was released. The initiative provided for a contract survey that evaluated the attitudes, knowledge, and perceptions of farmworkers living and working in San Luis Obispo County. The collaboration included county agriculture and health agencies, local worker advocates and growers, staff from DPR's worker health and safety and enforcement branches, and U.S. EPA representatives. The study report can be found at www.dhs.ca.gov/ohb/aginjury/slosurvey.pdf.
- 4. **Permit Pilot Project with Counties**: A consultant was hired to review the current restricted materials permit program used at CAC offices for a possible replacement program called the State permit and use report system. The consultant completed the draft prefeasibility study report and presented it to management. The report addressed a comprehensive upgrade and programmatic enhancement to the DOS-based restricted material permit and use report system. The study report documents the business processes, summarizes the business needs and functional requirements, presents a Web-based conceptual design, and includes preliminary project management and risk

- management plans. The study also covers preliminary cost estimates, including DPR staff and resources, software customization, data conversion, and implementation.
- 5. Local Enforcement Effectiveness Procedures: In November, DPR implemented changes to the procedures used to evaluate the effectiveness of CACs in regulating pesticides. The new criteria will improve the transparency of the procedures and ensure enforcement resources are devoted to the most critical need.

Priorities

- 1. Compliance Improvement: DPR's compliance work group has developed a program to reevaluate industry compliance levels in selected counties previously assessed. The program uses the existing overview inspection framework to determine how the implemented improvements are working and the effect the program changes had on industry compliance levels. The data from this compliance assessment oversight inspection program will be analyzed and compared to the results of the original compliance assessments for each county reevaluated. Data from the inspection forms will be entered into the county pesticide compliance and assessment database. This database can be used to set baseline compliance levels for continuous program evaluations by DPR, as well as to assist CACs in developing negotiated work plans and setting local program priorities. A status report to the Legislature will be prepared in spring 2003.
- 2. **Environmental Justice Policy**: DPR and the CACs have adopted mission statements and goals that reflect their commitment to ensuring environmental justice. In early 2003, DPR will develop, solicit comments on, and adopt a formal statement of its environmental justice policy.
- 3. County Permit and Use Reporting: With the introduction of ArcGIS as the standard upgrade to ArcView, a growing number of counties are now using ArcGIS. This has limited interest in the Kern ArcView applications. DPR will concentrate its priorities and activities on more active developments in the ArcGIS environment, which will help integrate a future State permit and use report system. Specifically, DPR will convert the ArcView notice of intent tool to ArcGIS. This will promote wider use of this valuable restricted material pre-application evaluation tool in other counties.
- 4. **Permit Pilot Project with Counties**: During the first half of 2003, DPR will address its resource constraints (hiring freeze and abolishment of vacant positions) and the State's current fiscal crisis. DPR will initiate a timeline for a formal feasibility study report and budget change proposal.

Continuously Improving Performance

Cal/EPA Goals 7 and 8; DPR Strategic Plan Goals 5 and 6

The strength of DPR's program comes from its staff. Long-term, stable funding will be imperative to fulfilling DPR mandates. The proliferation of data and the maturing electronic information age have

dramatically increased the opportunities to improve the department's processes and provide greater access to data.

Accomplishments

- 1. Government-to-Business Web Site: Working directly with the e-business office of the Department of General Services (DGS) and Natoma Technologies, DPR expanded its online county registration licensing pilot project to include San Joaquin, Merced, Madera, Fresno, Kings, Tulare, and Kern counties in the original pilot, for a total of 13 counties. This expansion resulted in continuous coverage from Contra Costa to Los Angeles County. This coverage also enables pest control businesses, advisers, and pilots to review their license and compliance information maintained by DPR, obtain statewide county registration information, and submit registration information to participating counties.
- 2. Risk Assessment and Peer Review Process: As a result of the reductions to the risk assessment programs, DPR evaluated how to improve the prioritization and completion of risk assessments. A new process was detailed in the fall of 2002 that will ensure that the risk assessments will address all routes of exposure and take particular emphasis on high-risk populations such as children.
- 3. Compliance Assessment and Improvement: DPR began the implementation of a compliance assessment oversight inspections program to re-measure industry compliance levels in four counties that had been previously identified with low levels of compliance for worker protection requirements.
- 4. **U.S EPA Work Share Project**: Residue reviews for the active ingredient imidacloprid on beans, peas, strawberries, and stone fruit were sent to U.S. EPA for completion. Also, tolerances were completed in August for the active ingredient fludioxonil on berries, stone fruit, and pistachios. Fludioxonil was the first active ingredient that DPR did both a residue review and the dietary assessment, bringing together intradepartmental activities of the pesticide registration and medical toxicology branches. DPR's fludioxonil work-share activity accounts for the elimination of one California section 18 (post-harvest treatment on stone fruit) and five section 18s in other states for the same use.

Priorities

- 1. **Increased Enforcement Around Schools**: With the enactment of AB 947 (Jackson, Chapter 457, Statutes of 2002), DPR will be proposing regulation changes that increase penalties for pesticide violations around schools and provide policy guidance to CACs for establishing specific requirements governing pesticide use in the vicinity of schools.
- 2. **Compliance Assessment and Improvement**: DPR will continue to collect and analyze information from the compliance assessment oversight inspection program and establish program goals and objectives for 2003–04. Also, DPR and the CACs will be testing revised inspection

- forms and procedures intended to improve compliance. Data will be collected from all CAC inspection forms and analyzed for setting future performance goals and resource allocation.
- 3. U.S. EPA Work Share Project: DPR continued to partner with U.S. EPA in sharing data reviews on pesticide registration activities. DPR is working with U.S. EPA to finalize the fiscal year 2003 work plan by the start of the federal fiscal year beginning October 1, 2003. The potential chemicals are azoxystrobin, bifenazate, fenhexamid, tabufenozide, and dimethomorph. DPR will do the residue reviews on all chemicals and dietary assessments on all products except bifenazate.
- 4. Online County Registration for Pest Control Licensees: With California's continuing budget crisis and the elimination of additional government positions, DPR's efforts in this area will likely be scaled back. However, feedback from the business community relative to online business transactions with the State has been very favorable. DPR should logically continue to take advantage of improvement opportunities through leveraging current knowledge, despite severe resource constraints. As such, DPR staff will continue to train and support the participating pilot CACs and look for economical opportunities to expand the very successful industry outreach program.
- 5. **iLicense (Online Licensing)**: This project included an assessment of DPR's ability to develop linkages between the front-end licensing transaction forms and the back-office database. As a result of this evaluation, DPR will need to modify its existing database to work effectively with the front-end licensing application. With the DGS application nearing completion, DPR will concentrate its efforts in 2003 on refining business processes, remodeling the database, and upgrading existing technology in order to fully utilize the DGS online program.
- 6. **California Pesticide Information Portal**: In January 2003, the California Pesticide Information Portal will go online, giving visitors to DPR's Web site the ability to conduct customized searches of the world's best and most extensive database of pesticide use information.